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R. LEW

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LAMP SHADE AND THE LIKE

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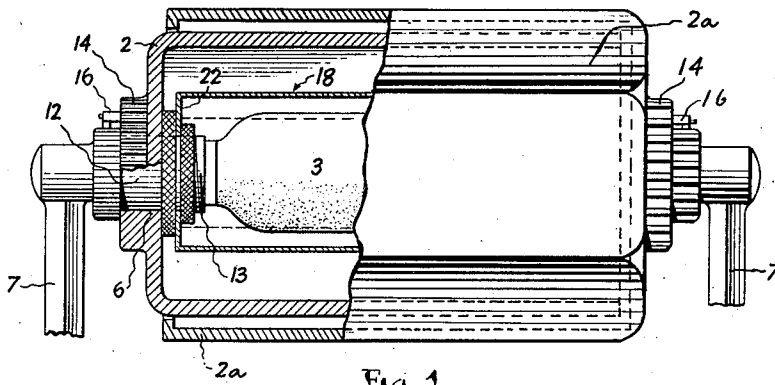


Fig. 1.

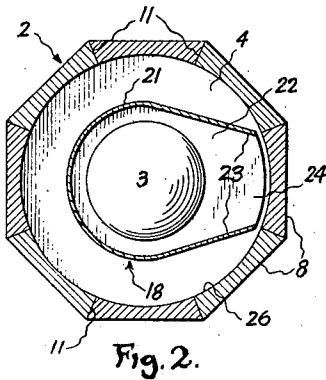


Fig. 2.

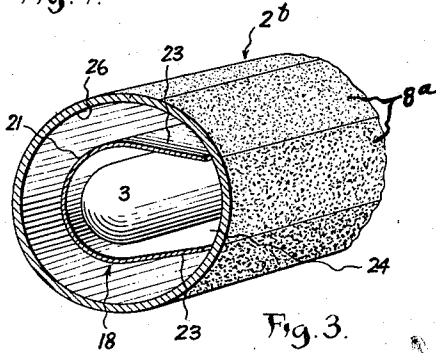


Fig. 3.

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LAMP SHADE AND THE LIKE

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1 Claim. (Cl. 240—1)

This invention relates to shades for use with lamps which are employed for domestic, industrial, commercial and a variety of other purposes.

Hitherto, no simple and effective lamp shade has been provided which is capable of adjustment to vary the effective brightness of the source of light with which the shade is employed to meet the individual requirements of the user. It is usually necessary to interchange shades and/or lamps in order to obtain the desired effect.

The primary object of the present invention is to provide an improved lamp shade or the like which is of relatively simple and inexpensive construction and is capable of being adjusted in a simple and convenient manner in order to regulate the effective brightness of the lamp to which the shade is fitted in accordance with requirements.

Referring to the drawing which forms part of this specification:

Figure 1 is a part sectional side elevation of an adjustable lamp shade in accordance with one embodiment of the present invention.

Figure 2 is a cross section of the parts seen in Figure 1 with the outer hood removed.

Figure 3 is a sectional perspective view of a lamp shade in accordance with a modification of the invention.

According to one suitable embodiment of the invention as illustrated in Figures 1 and 2 of the accompanying drawing, the improved lamp shade comprises inner and outer hoods or covers 2, 2a adapted to accommodate an electric or any other suitable type of lamp 3. Each hood or cover may be of substantially cylindrical or tubular form although it is to be understood that it is not essential for the sides of the hood to be parallel in that they may be inclined or curved as may be desired provided they cooperate to form a double walled enclosure for the lamp.

The inner end of the inner hood 2 is provided with a suitably sized aperture 6 whereby the hood may be passed over its associated lamp socket and being secured to a suitable support 7 as hereinafter described.

In accordance with the present invention, each hood or covers 2, 2a is provided with a plurality of zones or sections 8 which may extend longitudinally of the hood. These zones or sections are of varying degrees of light density or translucency. For example, the translucent properties of the hood sections may range from substantial clearness to substantial opacity, the intervening zones or sections varying between these two extremes.

Each hood or cover 2, 2a may be of hexagonal, octagonal, or any other polygonal shape in cross section. Thus, each face may constitute one of the aforesaid zones or sections 8 which are thus clearly defined. In this case, the several sections of the hood may be formed separately in any suitable manner so as to impart the desired degree of light density to the respective sections. The latter are secured together at their opposite edges as at 11, for example by an adhesive or the like, to the adjacent sections in such a manner as to form a hood structure having a continuous or unbroken outer surface as seen more clearly in Figure 2.

Alternatively, the hood may be of unitary formation as indicated in Figure 3 of the drawing in which the inner hood 2b is shown by way of example, as being of a circular shape in cross section with the zones or sections 8a of different light transmission capacities defined upon the inner or outer surfaces thereof.

The light transmission of the various zones or sections of the hood may be varied in any suitable manner. For example, different shades of dyes, pigments or the like may be applied to the various zones or sections, or sand blasting, etching, or any other suitable treatment may be employed for providing the desired effect.

It will be evident that the hoods or covers 2, 2a of the improved lamp shade may be composed of a wide variety of different materials. Glass, synthetic resin or other plastic mouldable material is probably the most suitable for the purposes of the present invention.

Each hood or cover 2, 2a is provided with a rotary or like mounting 12 whereby the hood may be rotated circumferentially in relation to its lamp 3 so as to position the desired zone or section 8 between the lamp and the user in accordance with requirements. Any suitable form of screw socket or the like 13, similar to the devices employed for holding conventional lamp shades in position may be employed for supporting the improved hood or cover. The latter may be provided at its inner end with an outstanding circumferential rib or flange 14 having a serrated edge whereby it may be readily gripped for turning the shade about its support. If desired, a spring influenced detent 16 or a pawl and ratchet or like device may be fitted to each hood and/or its mounting, so as to yieldingly retain the hood in the desired operative position.

In combination with the foregoing, a means is preferably provided for directing the light rays from the lamp 3 through the zones or sections

8 only of the hoods which are in use. For this purpose, the inner hood is provided with an associated masking device 18 which may be composed of metal or any other suitable opaque or substantially opaque material.

The masking device is adapted for mounting within the hood or cover and may comprise a substantially semi-circular body portion 21 which is preferably closed at its opposite ends as at 22 and is provided with laterally spaced sideward extensions or flanges 23 forming an aperture 24 extending longitudinally of the body portion so as to direct the light rays from the lamp through the walls of the hoods. The distance between the outer edges of the flange 23 is substantially identical with the width of the respective zones or sections 8 of the hoods or covers. The inner surfaces of the latter may be of substantially circular form in cross section as at 26 in order that the outer edges of said flanges 23 may be located at all times, in close proximity thereto and thus minimize the escape of light through the adjacent sections of the hood.

It will be readily appreciated that the hoods or covers 2, 2a may be held stationary and the masking device adapted to be rotated in relation thereto, if so desired.

Although the improved lamp shade may be effectively supported at one end only, as aforesaid, an additional support may be provided at the opposite end of the hood if so desired.

Instead of employing a separate masking device as aforesaid, a similar result may be obtained by applying a mask such as an opaque or substantially opaque coating or the like direct to an appropriate portion of the surface of the lamp globe 3.

The outer hood 2a is larger than the other so as to accommodate the inner hood in such a manner as to permit of independent rotation of said hoods in relation to the lamp and to each other whereby any desired combination of zones on the associated hoods may be positioned between the lamp and the user.

In addition to the wide field in which the improved lamp shade may be employed in the home and in shops, factories, offices, hospitals, theatres and the like, it is believed that the device may be readily adapted for use as a head lamp on automobiles and other vehicles. Rotation of the hoods may be effected by means of a Bowden wire or in any other suitable manner for dimming purposes whilst one or more of the hood zones or sections 8 may be orange coloured for use in foggy or like weather. It is thought that glare would also

be obviated by employing a substantially horizontal hood and masking device and a reflector adapted to provide a substantially flat or straight beam of light.

It will be readily appreciated that the improved lamp shade may be quickly and easily adjusted to provide light of the desired degree of brilliancy. A relatively wide range of variations may be provided in accordance with the number of zones or sections provided on the one or more hoods employed.

Furthermore, the improved construction and arrangement of the associated lamp, mask and hood facilitates assembly of the various parts, while the positioning of the mask between the lamp and the hood enables the latter to be readily cleaned, and in addition, minimizes undesirable heating of the hood.

It will also be understood that various other alterations, modifications and/or additions may be introduced into the foregoing construction and arrangement of parts, without departing from the spirit and scope of the invention as defined by the appended claim.

Having now described my invention, what I claim as new and desire to secure by Letters Patent is:

An illuminating device of the character described comprising a support, a cylindrical boss carried by said support, a lamp socket mounted on axial alignment with said boss, a lamp in said socket, a hood of substantially tubular formation rotatably mounted at one end on said boss and concentrically surrounding said lamp, said hood having a plurality of zones of varying degrees of light density or translucency extending longitudinally thereof a mask surrounding said lamp for masking a portion of the latter and having an opening for directing a beam of light from the lamp through one of said zones, means for stationarily mounting said mask on said boss for supporting the mask within the hood between the latter and the lamp, a spring pressed detent means carried by the hood and boss for retaining the hood in positions to which it is rotated, a second support, a second boss carried thereby in axial alignment with the first-mentioned boss, a second hood rotatably mounted at one end on said second boss, open at its other end and concentrically surrounding the first-mentioned hood, said second hood having a plurality of zones of varying degrees of light density or translucency extending longitudinally thereof.

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